Determination of Public Land (Rangeland) Health for 64072 JOE D. DURAND

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on the assessments, it is my determination that the public land within the Joe D. Durand allotment #64072 meets the (1) Upland Sites standard, (2) Biotic Communities, including Native, Threatened, Endangered and Special Status Species standard and (3) Riparian standard.

/s/ T. R. KREAGER	07/21/2004
Assistant Field Manager	Date

Standards of Public Land Health
Evaluation of 64072 JOE D. DURAND Allotment
[12/30/2003]

The Roswell Field Office conducted rangeland health assessments at one study site within the Joe D. Durand Allotment #64072. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64072-IDSU-A164	X			X			X		

Twenty-two (22) indicators for Rangeland Health were evaluated for the public land on the Joe D. Durand #64072 allotment. Ten of these assessed soil site stability, 11 assessed hydrologic function and 13 assessed biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on one location were utilized to assess the rangeland health of the public land within the allotment. This allotment is in the "C" (custodial) category due to the small amount of public land present.

The recent dry conditions have impacted this allotment and surrounding area over the last several years. The site classifies as a SD-3 salty bottomland with a Vinton-Glendale soil phase. This isolated 40 acre/18 hectare tract has no legal public access at the present time, and is completely surrounded by private land. All the indicators assessed rated None to Slight to Slight to Moderate with the exception of 2. Functional/structural groups and invasive plants both rate Moderate. Although alkali sacaton (Sporobolus airoides) and plains bristlegrass (Setaria macrostachya) can be observed, their dominance has been replaced in some areas by annual forbs like Russian thistle (Salsola kali) and the perennial grass, common reed (Phragmites australis). Also of concern is the occurrence of goldenrod (Solidago canadensis). Abutting the river portion is the usual stand of saltcedar (Tamarix chinensis) which may have crowded out the other shrubs and grass. The fenceline next to the river does not entirely delineate and separate the public land from the private and actually intersects the river portion of the public parcel.

Wildlife - Evaluation of the integrity of the biotic community considered several indicators as attribute indices for the area of interest. Biotic indicators are interrelated with several other indicators, including soil/site stability, hydrologic function, and vegetation. Several indicators are singularly biotic and address the vegetative aspect of

the ecological site description, such as functional/structural groups and invasive plants, as discussed above, which rated Moderate.

Considering the riparian and floodplain nature of the area of interest, these two indicators can be expected to exhibit saltcedar invasion and river channel changes. In addition to the standard worksheet biotic factors, four specific wildlife indicators and descriptors are included in this evaluation. Wildlife Habitat and Population indicators rate Slight to Moderate. The 40-acre isolated parcel of Pecos River aquatic and riparian habitat is divided by the river. Saltcedar infestation is present along the changed river course (different location than what is mapped on USGS maps). The parcel has been modified by the changing stream channel location over the years. Adjacent uplands are irrigated croplands. The river is fenced off along the upper banks. Very diverse habitat area for a variety of terrestrial and aquatic wildlife. A variety of wildlife were observed, including mule deer and pheasant. Wildlife populations are diverse due to the varied habitats and the Pecos River itself. Access is limited so wildlife populations are relatively undisturbed. Range site production and cover of a variety of preferred plant species for wildlife, such as forbs and native woody species such as black willow and seep willow, and the availability of seed for food and regeneration, is moderated by saltcedar invasion and land use. Current observed wildlife populations reflect diverse habitat conditions. With respect to Special Status Species, the Pecos River is habitat for the Pecos bluntnose shiner and Pecos pupfish. Floodplain habitat is potential locations for Pecos sunflower in favorable wetter years. The Pecos River serves as corridor for a variety of avifauna, some of which are species of concern for the State of NM. Habitat and Population indicators are rated None to Slight for aquatic species. No Pecos sunflower populations were found during the evaluation but potential habitat exists.

Hydrology - Pasture IDSU - The rills, gullies, wind scoured blowouts and or depostion areas indicators rated as none to slight. The water flow patterns, pedestals and or terrecettes, bare ground, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community and distribution relative to infiltration and runoff, compaction layer, litter amount, and physical/chemical/biological crusts indicators rated as none to slight. The recent dry conditions or drought has had a none to slight or a slight to moderate effect on all of the indicators. Sand and gravel deposits of Quaternary alluvial deposits outcrop in the area.

It is the professional opinion of the Assessment Team, that the public land within the Joe D. Durand allotment meets the Upland, Biotic and Riparian standards. See site notes and recommendations for any additional information regarding this ecological site.

Recommendations: Although this 40 acre/18 hectare tract is isolated with no legal public access, it may still only be managed mainly due to its' riparian floodplain portion and the parameters associated with it. Possibly a more regular schedule of monitoring can be put into place to analyze the trend for the area. Saltcedar (Tamarix chinensis) is of major concern here along with goldenrod (Solidago canadensis) infestations farther inland. Eradication of saltcedar could be performed as an experimental tool to study the effects on larger tracts. Possible mechanical removal rather than chemical. With

cooperation with the allotee, measures can be taken to insure ease of access for future management considerations. The RMP should be reviewed to identify whether this isolated tract is earmarked for disposal. The tract also is frequented by mule deer (Odocoileus hemionus) and is home to game and non-game birds. This should also be of importance for future management objectives.

Wildlife Comment - BLM policy is to retain in federal ownership wetland-riparian habitats. Need to evaluate adjacent land in order to effectuate habitat management. Might want to consider fencing off the parcel and removing it from the grazing lease all together. May want to conduct saltcedar control and acquire an easement for administrative purposes. Because the parcel is isolated, benefits to the public are limited.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64072-IDSU-A164			
Legal Land Desc	SESE 4 0130S 0260E Meridian 23	Acreage	40
Ecosite	042CY033NM SALTY BOTTOMLAND S	Photo Taken	Y
Watershed	13060007030 ZUBER		
Observers	NAVARRO/BAGGAO	Observation Date	12/31/2003
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	VG	Soil Taxon Name	VINTON
Texture Class	NM666 FSL	Soil Phase	VINTON-GLENDALE
Texture Modifier	NM666 LOAMY FINE SAND		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	8.23	NOAA Growing Season Precipitation	4.91
NOAA Avg Annual Precipitation	12.78	NOAA Avg Growing Season Precipitation	10.65
Disturbances and Animal Use:	There is a herd of mule deer (Odocoileus hemionus) that frequents the area. Also this tract is potentially subject to periodic flooding from the Pecos River.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						

S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground				X	
Comments:	ESD allows for 24%. Bareground falls within the expected range.					
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion				X	
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer				X	
Comments:						
B	Functional/Structural Groups			X		
Comments:	Common reed (Phragmites australis) has dominated the east side next to the river. Goldenrod (Solidago canadensis) also is evident by the dormant and dead stalks. No tobosa (Pleuraphis mutica) can be observed, but there is some alkali sacaton (Sporobolus airoides) and annual forbs in abundance.					
B	Plant Mortality/Decadence				X	

Comments:						
H B	Litter Amount				X	
Comments:						
B	Annual Production				X	
Comments:	Annual production is now approximately 600 lbs/ac or kg/ha.					
B	Invasive Plants			X		
Comments:	Common reed (Phragmites australis) and goldenrod (Solidago canadensis) are evident.					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	Physical crusts evident.					
B	Wildlife Habitat				X	
Comments:	A 40-acre isolated parcel of Pecos River aquatic and riparian habitat. The parcel is divided by the river. Saltcedar infestation along the changed river course (different location than what is mapped on USGS maps). The parcel has been modified by the changing stream channel location over the years. Adjacent uplands are irrigated croplands. The river is fenced off along the upper banks. Very diverse habitat area for a variety of terrestrial and aquatic wildlife.					
B	Wildlife Populations				X	
Comments:	No specific wildlife population information at this time. A variety of wildlife were observed, including mule deer and pheasants. Wildlife populations are diverse due to the varied habitats and the Pecos River itself. Access is limited so wildlife populations are relatively undisturbed.					
B	Special Status Species Habitat					X
Comments:	Pecos River is habitat for the Pecos bluntnose shiner and Pecos pupfish. Floodplain habitat is potential locations for Pecos sunflower in favorable wetted years. Pecos River serves as corridor for a variety of avifauna, some of which are species of concern for the State of NM.					
B	Special Status Species Populations					X

Comments:	No specific wildlife population information at this time. It is expected that the aquatic habitat is populated by the Pecos bluntnose shiner. Since the parcel is isolated, efforts to monitor populations in this small parcel were not pursued. No sunflower populations were noted during this time of year.

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	7	3
H	Hydrologic	0	0	0	9	2
B	Biotic	0	0	2	8	3

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	2	11

Site Notes: This 40 acre/18 hectare isolated parcel has no legal access. The parcel is surrounded by private land and in actuality does encompass a swath of river on the eastern side. The RMP should be reviewed to identify whether this area is on the list for disposal. Otherwise a more rigorous monitoring schedule should be put into place. Thirteen years between quantitative evaluations is too long a time frame to arrive at any management strategy. This in fact does have riparian issues on a small portion of the Pecos River floodplain. The approximate study location was gps'd to be entered into the study point coverage. The border of public land is adjacent to some irrigated fields

operated by the allotee. No livestock were observed at this time. Wildlife do inhabit the area and surrounding land.


64072 Durand
12/30/2003
VEGID 164


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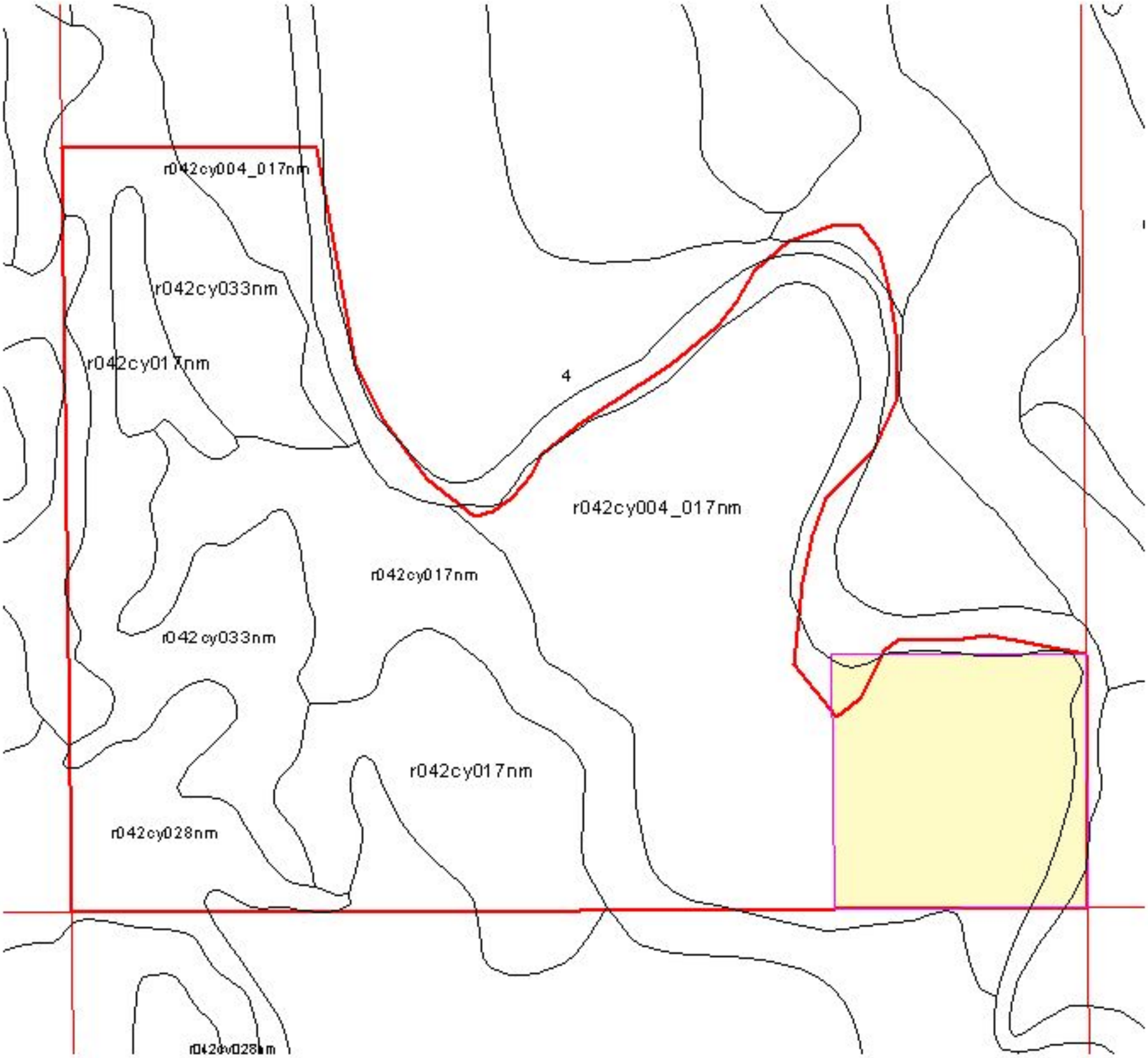
Rangeland Health Assessment
Ecological Sites

Allotment 64072

T13.R26E



T13S.R26E

0 0.2 Miles

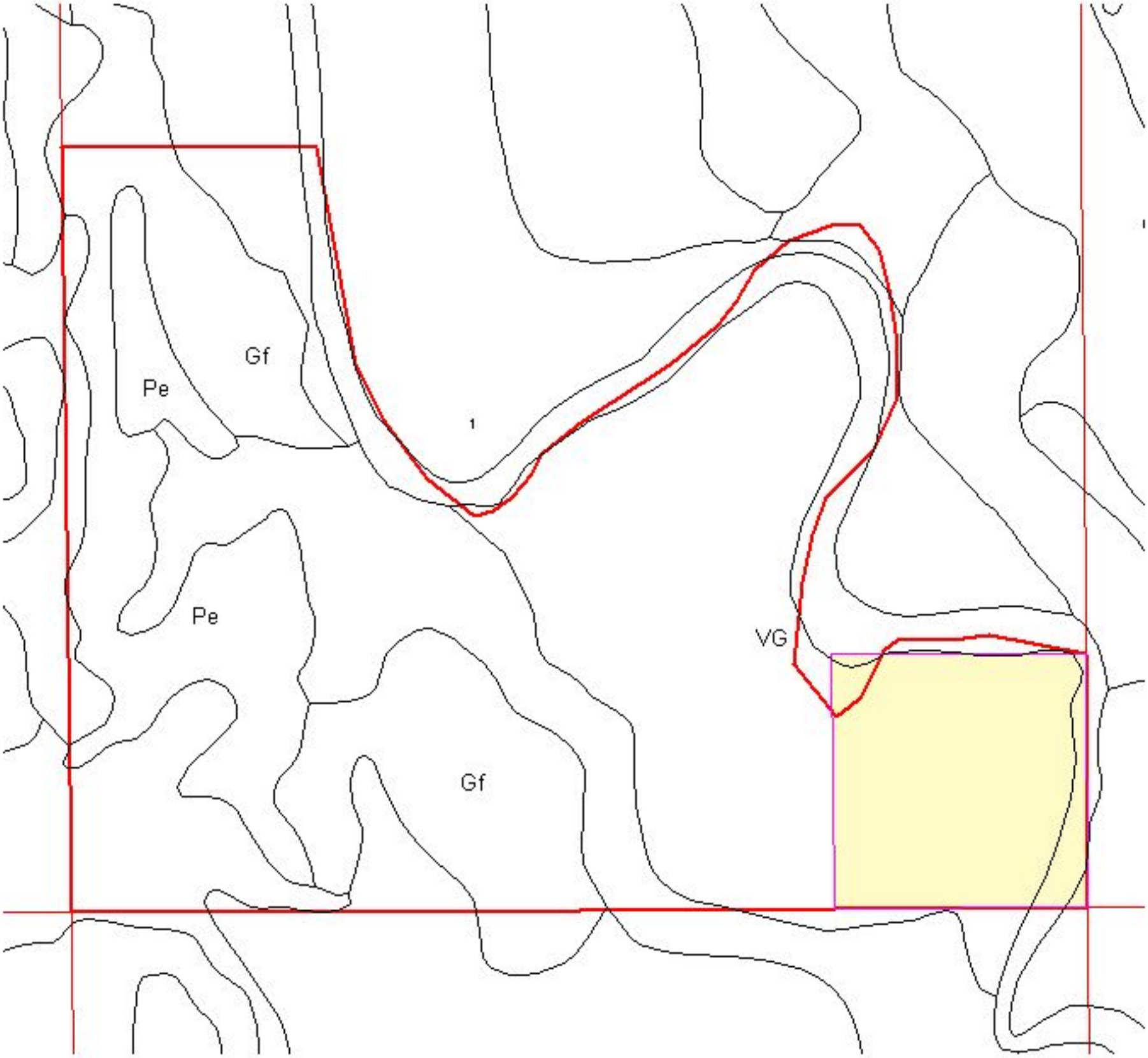
Public
Study Plots
State
Private
Study Locations
Ecological Sites
Allotment Boundary

Produced by the Roswell Field Office
GIS Intern on July 24, 2003.

Rangeland Health Assessment
Soil Mapping Units

Allotment 64072

T13.R26E



T13S.R26E

0 0.2 Miles

Public
Study Plots
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Soil Mapping Units
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